

Michigan GIS 911 Repository



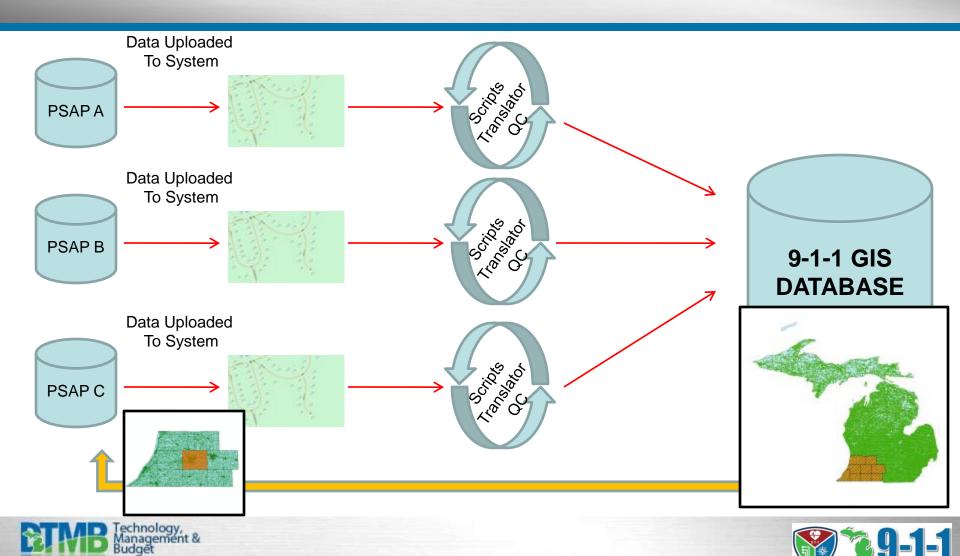
ENHANCE 911 Act Grant Project

- Created a central 9-1-1 GIS Repository
 - Enabling PSAPs to share GIS information
 - Establishing MOAs
 - Setting standards for GIS data entry
 - Future framework for NG9-1-1 database
- Statewide Public Safety Answering Point (PSAP) Boundary Layer
- Statewide Road Centerline Layer





How does it work?



911 User Request

STATE OF MICHIGAN GIS REPOSITORY USER REQUEST

To register application users, the PSAP Director must provide the information in this table and return it via e-mail to armitagem@michigan.gov or fax it to (517) 241-0387, Attn: Mr. Michael Armitage. A description of each role is provided below the table.

| 911 Repository Role | Name | Organization | Email and phone # |
|--|------|--------------|-------------------|
| PSAP Administrator | | | |
| Alternate PSAP Administrator(s) (Optional) | | | |
| Data Importer(s) | | | |
| Data Exporter(s) | | | |
| Restricted Administrator | | | |

| | | STANKE . |
|-------|------------|----------|
| Name: | Signature: | |

If you have any questions or concerns about this process, please contact:

Mr. Michael Armitage, armitagem@michigan.gov at MSP at (517) 241-2809, fax (517) 241-0387 or

Mr. Mark Holmes, holmesm3@michigan.gov at CSS at (517) 373-7910, fax (517) 373-2939.

<u>PSAP Administrator</u> – This role is established for the person who will be managing the accounts for the users within a specific PSAP jurisdiction. This role will typically be assigned to the 911 Director. This access is limited to PSAPs that are a branch of the entity that is party to the 'memorandum of understanding' for the 911 GIS Repository.

<u>Alternate PSAP Administrator(s) (optional)</u> – This role is established for a person to provide a backup role to the PSAP Administrator for assigning logins or accounts. This role will have the same permissions level in the system as the PSAP Administrator.

<u>Data Importer(s)</u> – This role is established for a person who will be providing GIS data updates to the repository system. This role can be assigned to a PSAP staff member, county GIS department staff member or a vendor. This role is typically assigned to the person who is maintaining the GIS data.

<u>Data Exporter(s)</u> – This role is established for a person who will be extracting GIS data from the repository for 911 purposes on a regular basis. For example, the data exporter might be the person who typically integrates GIS data with existing CAD systems.

Restricted Administrator- This role is established as a 'view only' for PSAPs that are not a branch of the government which is party to the 'memorandum of understanding' for the 911 GIS Repository.

This form is used to request access to the 911 GIS repository. It is located under "Current Issues" on the State 911 Committee website.



911 User Request michigan.gov/snc



SNC-500 Form

SNC-001 Form
 GIS Grant Update

SNC-301 Form and Instructions

GIS Repository User Request

911 GIS Repository Training December 11, 2013
 MI_NENA_GISProject_May_22_2012
 Enhance 9-1-1 Grant GIS Project



PSAP Administration Tools

- Each PSAP (with MOU in place) will have primary designated PSAP Administrator
- Each PSAP (with MOU in place) can assign alternate PSAP Administrators
- Internal communication for approval processes needs to be determined locally
 - For example, approving PSAP boundary changes





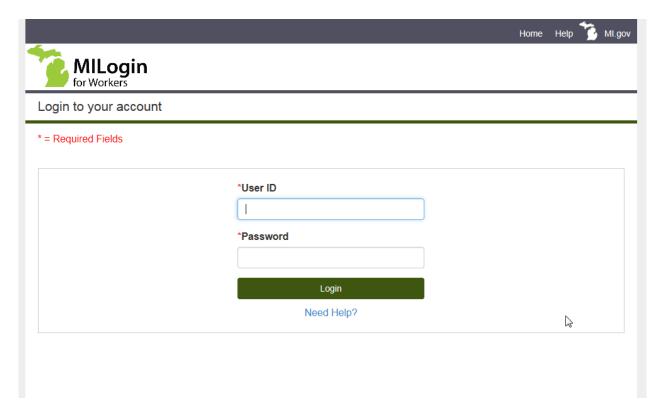
Roles

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https://milogin.michigan.gov



Access to the 911 GIS repository is through the State of Michigan MiLOGIN





https://milogin.michigan.gov

Don't have an account?

Create New Account

Guest Services

Continue as Guest

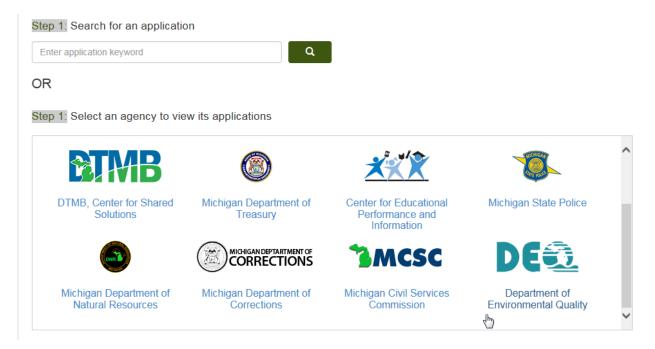
Creating a MiLOGIN account is simple. There is a 'Create New Account' on the main page.





https://sso.state.mi.us

To access the 911 GIS repository, click on 'request access' once you are logged into MiLOGIN. You can then find the application through a search or by selecting 'Michigan State Police' and '911 GIS Data Repository.'

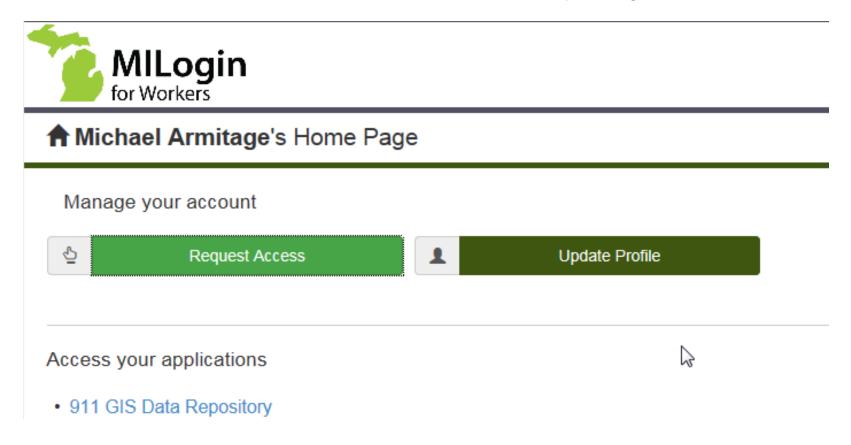






https://milogin.michigan.gov

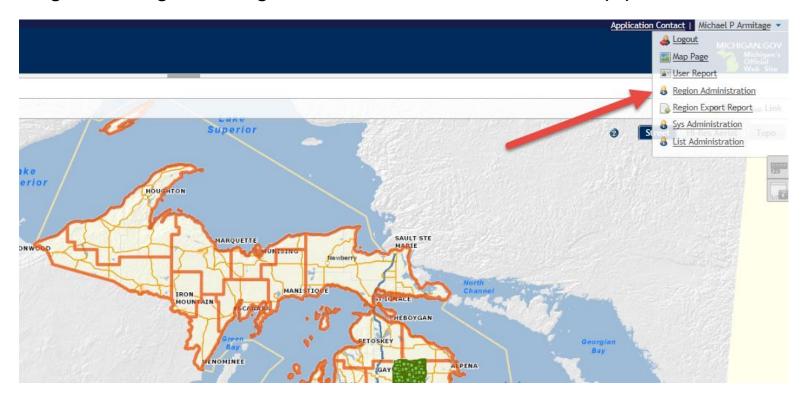
Once approved, the 911 GIS application will appear once you sign on.







Region/PSAP administrators can administer access privileges to their region through the 'region administration' link on the top pull-down.







Administration

This is a screenshot of the 'region administration' page.

Regions Users

Click the left arrow to view region members, click the user name to set permissions, click the region name to add or remove users.

Alcona County Central Dispatch

Alger County Sheriff Department

Laura L Blastic

Mark E Holmes

Allegan County Central Dispatch

Michael P Armitage

Robert J Hughes

Todd Brock

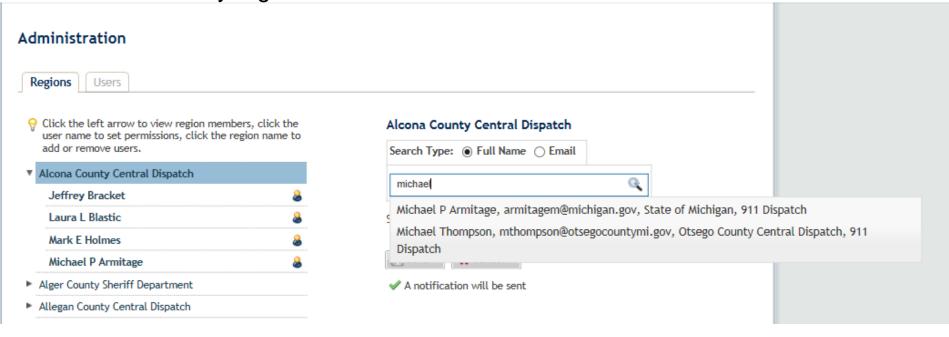
Set Permissions for Jeffrey Bracket

| Permission | Region | Roads | Structures | Emergency Service Zones |
|--------------|----------|----------|------------|-------------------------------|
| View Current | ✓ | ✓ | ✓ | ✓ |
| View Pending | ✓ | ✓ | ✓ | ✓ |
| Can View | ✓ | ✓ | ✓ | ✓ |
| Can Edit | ✓ | ✓ | ✓ | ✓ |
| Can Import | ✓ | ✓ | ✓ | ✓ |
| Can Export | ✓ | ✓ | ✓ | ✓ |
| Check All | | | | |
| Save \$ | Cancel | | | |



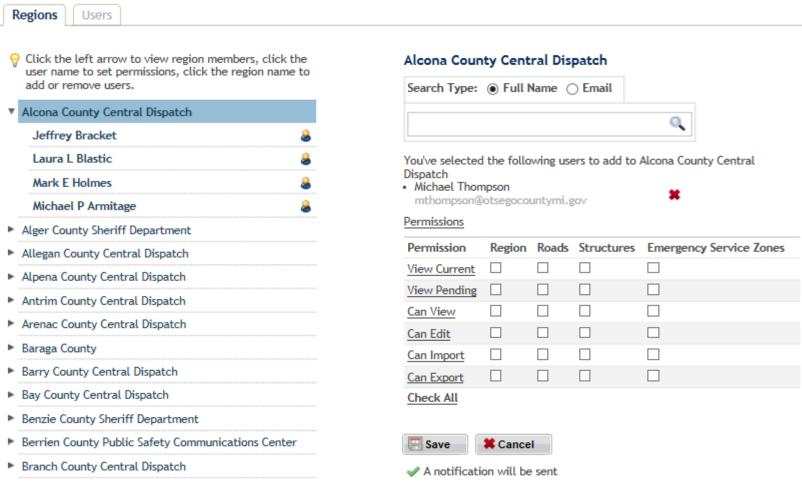


Region administrators can search for approved users to assign to their county/region.













Region Administration Tools: Permissions

Administration

By clicking on the user, the region administrator can assign specific privileges to the user.

Regions Users

| V | Click the left arrow to view region members, click the user name to set permissions, click the region name to add or remove users. |
|---|--|
| • | Alcona County Central Dispatch |

| Alcona County Central Dispatch |
|---------------------------------|
| Alger County Sheriff Department |
| Laura L Blastic & |
| Mark E Holmes & |
| Matt Waldron ** |
| Michael P Armitage |
| Robert J Hughes |
| Todd Brock |
| |

Set Permissions for Matt Waldron

| Permission | Region | Roads | Structures | Emergency Service Zones |
|--------------|--------|-------|------------|-------------------------------|
| View Current | | | | |
| View Pending | | | | |
| Can View | ✓ | ✓ | ✓ | ✓ |
| Can Edit | ✓ | ✓ | ✓ | ✓ |
| Can Import | ✓ | ✓ | ✓ | ✓ |
| Can Export | ✓ | ✓ | ✓ | ✓ |
| Check All | | | | |
| Save 1 | Cancel | | | |



Allegan County Central Dispatch



PSAP Administration: Remove User from PSAP

- Removing User Accounts
 - Rights are removed by PSAP Administrator
 - Account is Disabled by System Administrator request needs to be submitted by PSAP Administrator
 - Can be Re-Enabled If User Goes to Work at Another PSAP

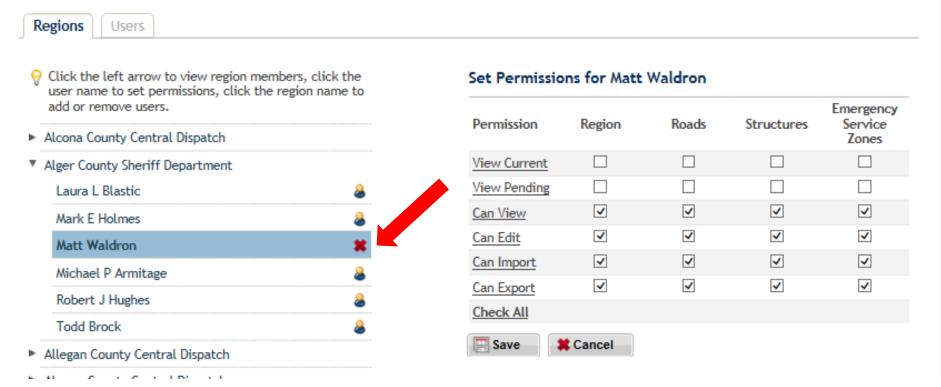




Removing User Accounts

Administration

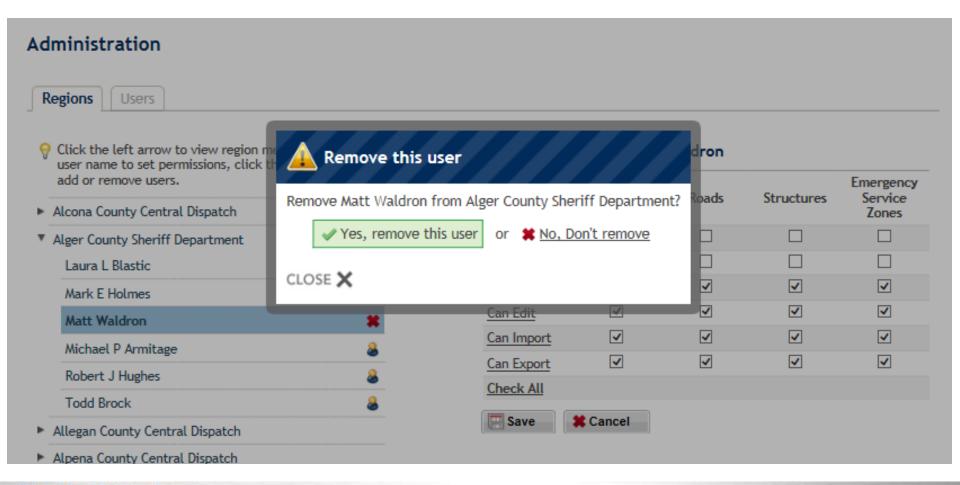
Click the red 'x' to remove access to your county/region by the user.







Removing User Accounts







PSAP Administration Tools

Requesting Data Export Rights for User

PSAPA PSAP B



PSAP Administrator Sends Request for CAD Administrator to have Export Rights for Neighboring County



PSAP Administrator and CAD Administrator Receive Status Email





PSAP Administrator Receives Email to Log into System and Grant User Export Rights to PSAPs Data

PSAP Administrator Approves or Denies **Export Privileges**







PSAP Administration: Requesting Permission

Administration

Region administrators can request that their users receive Import/export privileges with other regions.

Regions

Users

Below are users currently assigned to one or more of your regions. You may, edit a user's information, request access to another PSAP, deactivate the user, or create a new user. Note that newly created users will not display in this list until they are assigned to a region.

| New User | | | | | |
|-----------------|-------|----------------------------------|--------------------|----------------|------------|
| Name | Email | Organization | Туре | Phone Number | Acti |
| Amy L Beach | | Ogemaw County Central Dispatch | 911 Dispatch | 989-345-4911 | ♦ ₩ |
| Andrew Giguere | | Leelanau County | County GIS Contact | 231-256-8152 🕫 | % ≥ |
| Andrew Hartwick | | St Clair County Central Dispatch | County GIS Contact | 269-467-5576 | % ≥ |
| Ann Gasperich | | Keweenaw County | 911 Dispatch | 906-337-3471 | % ≥ |
| April Heinze | | Eaton County Central Dispatch | 911 Dispatch | 517-543-4924 | % ≥ |





PSAP Administration: Requesting Permission

Administration Users Regions Request access for Amy L Beach to another Region. ☐ Import ☐ Edit ☐ Export Access: ☐ Region ☐ Roads ☐ Structures ☐ ESZs Feature: Region: Alcona County Central Dispatch ~ Comments: Cancel





PSAP Administration: USERS

Administration

Region administrators can edit information for their region's users.







PSAP Administration: USERS

Administration Users Regions User Information Contact Info Email First Name Amy Middle Initial Last Name Beach Organization ~ Ogemaw County Central Dispatch Type Y 911 Dispatch Phone 989-345-4911 ✓ Active ✓ Notify user View or add comments to notification Save Cancel





Data Sharing and Agreements

- Memorandum of Agreement Between CSS and Each Participating Entity
 - Outlines Roles and Responsibilities of CSS and Participants
 - Established Disclaimers for Data Sharing
 - Signed Agreement

 Exported Data Can Only Be Used for 9-1-1 and Public Safety Purposes

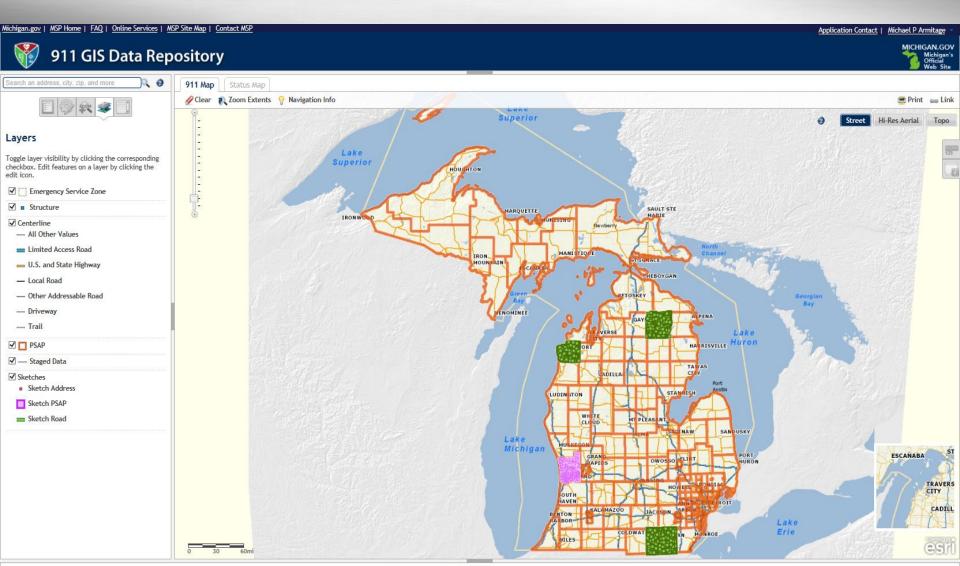




- Potential Uses
 - Only available for public safety via secure log in
 - The data viewer could benefit PSAPs where mapping does not currently exist for dispatch
 - The data viewer can be used to search addresses in other jurisdictions
 - Supplemental map to existing systems
 - Accessible via wireless in field or mobile command
 - Can be accessed in an EOC during large incident crossing multiple jurisdictions

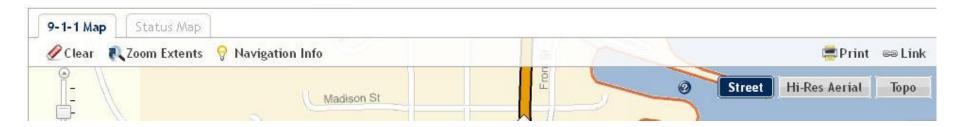






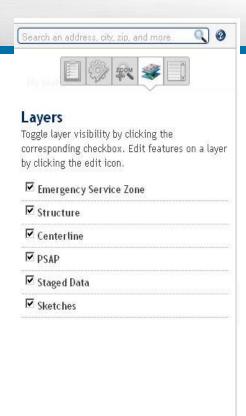
Users can view the maps in one of three modes:

- Street
- Hi-Res Aerial
- Topo.



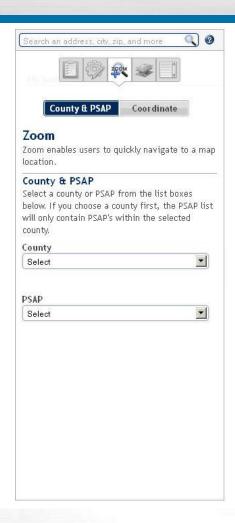


Users can select which layers they would like to view (located on the left-hand side).

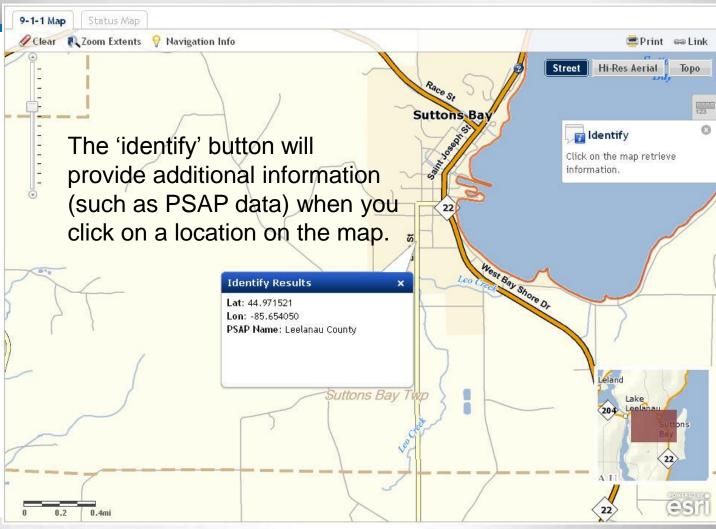




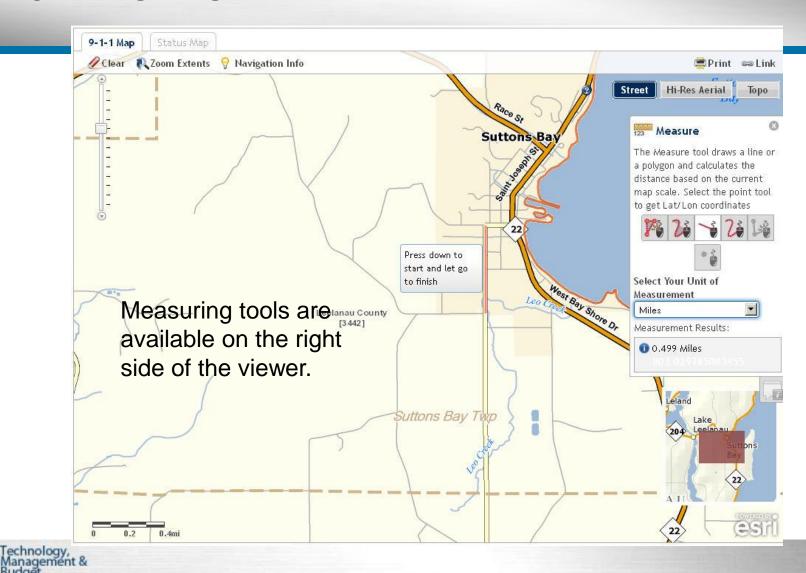
Zoom options are also available on the left toolbar.

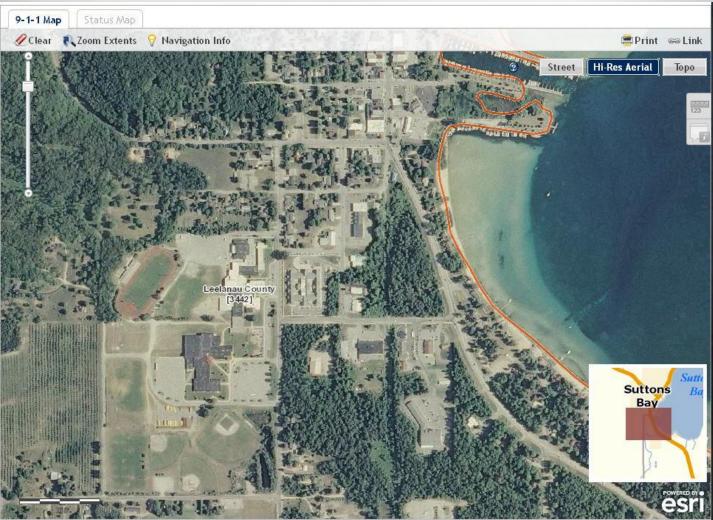










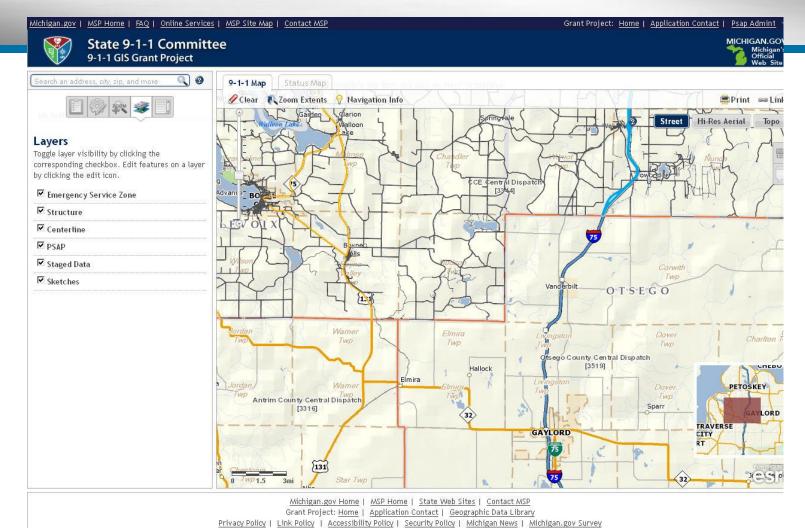




- Map Symbology
 - Populate FCC Codes
 - Populate RDCLASS Field
 - Outlined in addressing guide







Copyright @ 2001-2012 State of Michigan

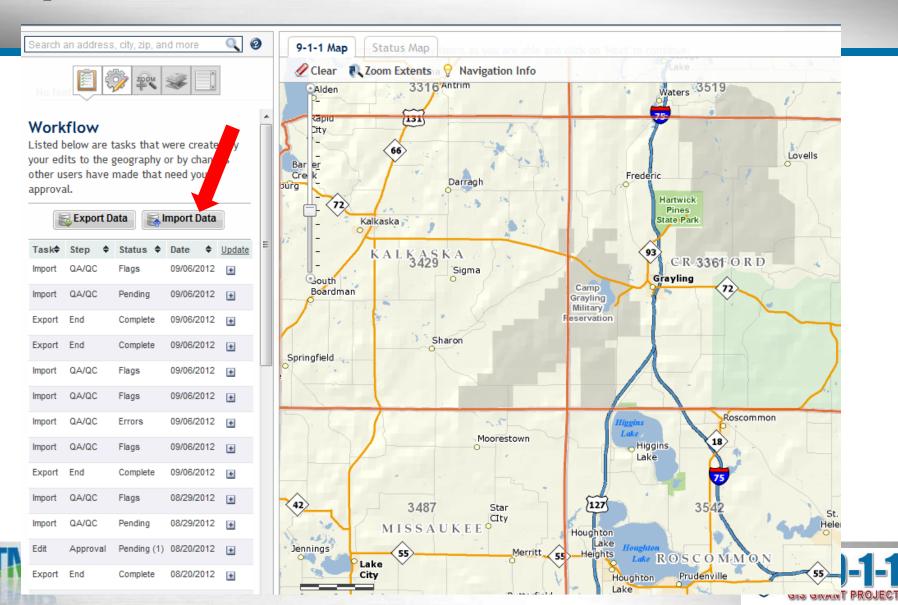


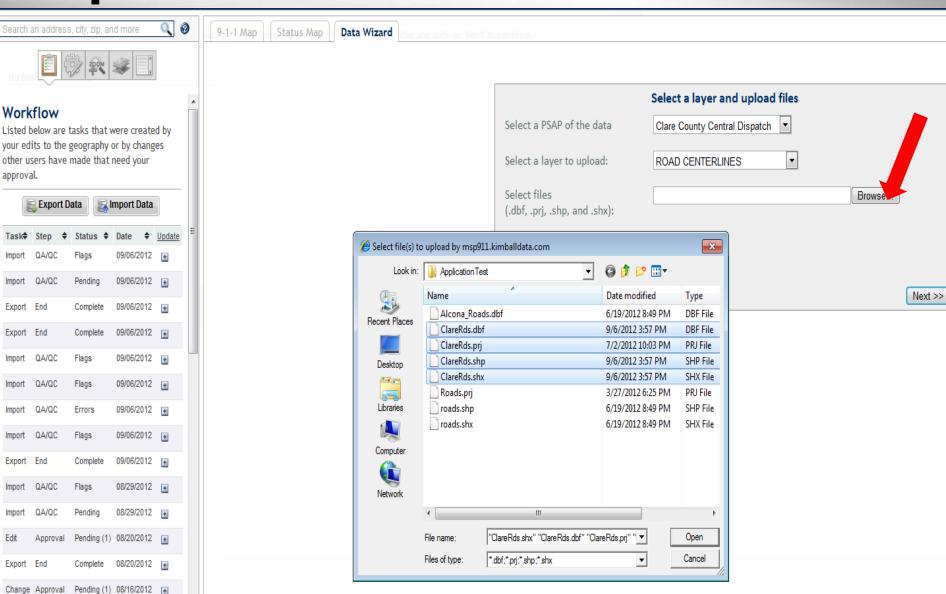
Import Data

- Road centerlines
- MSAG only for validation against new centerline layer being uploaded
- Emergency Service Zones Optional
 - Beneficial for Mutual Aid
 - Will be beneficial for NG9-1-1 and interoperability
- Site Structure Points Optional
 - Can be partial layer









9-1-1 Map

Status Map

Data Wizard

and click on 'Next' to continue

Please match data fields.

ROAD CENTERLINES

Match Fields

Repository Standards Your Shapefile Fields

SOURCE (type:A) * SOURCE

DATEUPD (type:D) * DATEUPD

▼

EFFDATE (type:D)

RCLID (type:A) * RCLID

▼

·

•

•

COUNTRY (type:A) * COUNTRY

STATE_L (type:A) * STATE_L

STATE_R (type:A) * STATE_R

▼

COUNTY_L (type:A) * COUNTY_L

COUNTY_R (type:A) * COUNTY_R

MUNI_L (type:A) * MUNI_L

MUNI_R (type:A) * MUNI_R

MCDDIV_L (type:A) *

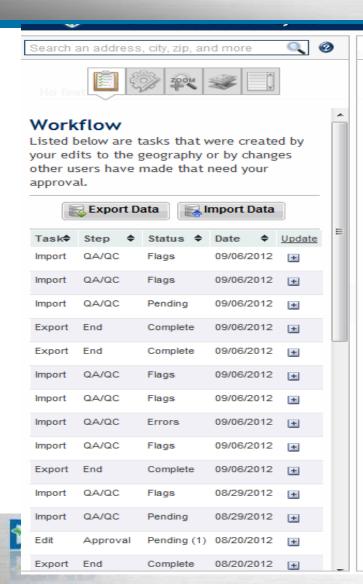
MCDDIV_R (type:A) *

UNCORP_L (type:A)

www.michigan.gov/911gisgrant







Status Map

9-1-1 Map

Centerline QA/QC Report (Flag Summary)

Workflow Details

Data Wizard

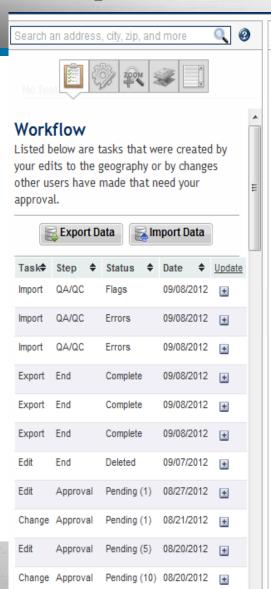
| Flag Name | Flags | Exceptions |
|--------------------------|-------|------------|
| Record_Count | 3849 | 0 |
| MUNI_LR_ISEmpty | 1 | 0 |
| EFFDATE_DatatypeNotValid | 3849 | 0 |
| LOGreaterThanHI | 24 | 0 |
| RangeContainsAllZeros | 213 | 0 |
| RangeParityInvalid | 8 | 0 |
| RangeOverlap | 65 | 0 |
| STSNoMatch | 1 | 0 |
| FlippedRange | 12 | 0 |

Select a Flag Name above to see all records that failed that scrub.

Export with No Data (flags only): Excel CSV

Export with Data: Excel CSV





Flagged Records

Status Map

9-1-1 Map

Displaying records that failed the Flag: RangeOverlap

Page 1 of 4

Previous

Workflow Details

Back to Summary

First

| | | r ago r or r | | | | | | |
|-------|---------------|----------------|-----------------|------------|-------|-------|-------|-----------|
| RCLID | Street | Left Community | Right Community | <u>LLO</u> | LHI | RLO | RHI | Exception |
| 1981 | W ASHARD RD | FREEMAN TWP | FREEMAN TWP | 7501 | 7989 | 7500 | 7988 | 0 |
| 1982 | W ASHARD RD | FREEMAN TWP | FREEMAN TWP | 6001 | 6299 | 6000 | 6298 | 0 |
| 1983 | W ASHARD RD | FREEMAN TWP | FREEMAN TWP | 6301 | 6549 | 6300 | 6548 | 0 |
| 1984 | W ASHARD RD | FREEMAN TWP | FREEMAN TWP | 6551 | 6699 | 6550 | 6698 | 0 |
| 1987 | W ASHARD RD | FREEMAN TWP | FREEMAN TWP | 6051 | 6999 | 6050 | 6998 | 0 |
| 3346 | W ASHARD RD | FREEMAN TWP | FREEMAN TWP | 7501 | 7989 | 0 | 0 | 0 |
| 3318 | BEECH TREE | SURREY TWP | SURREY TWP | 3131 | 3199 | 3130 | 3200 | 0 |
| 3320 | BEECH TREE | SURREY TWP | SURREY TWP | 3131 | 3149 | 3130 | 3148 | 0 |
| 3147 | S CLARE AVE | GRANT TWP | GRANT TWP | 9041 | 9999 | 9040 | 9998 | 0 |
| 841 | S CLARE AVE | GRANT TWP | GRANT TWP | 9001 | 9939 | 9000 | 9938 | 0 |
| 3380 | N CORNING ST | FARWELL | FARWELL | 171 | 299 | 170 | 298 | 0 |
| 2414 | N CORNING ST | FARWELL | FARWELL | 1 | 199 | 2 | 198 | 0 |
| 3145 | S EBERHART A | VE GRANT TWP | GRANT TWP | 11911 | 11999 | 11900 | 11998 | 0 |
| 842 | S EBERHART A | VE GRANT TWP | GRANT TWP | 11001 | 11909 | 11000 | 11908 | 0 |
| 1027 | FIVE LAKES DR | GRANT TWP | GRANT TWP | 7401 | 7579 | 7400 | 7578 | 0 |
| 3096 | FIVE LAKES DR | GRANT TWP | GRANT TWP | 7581 | 7749 | 7580 | 7748 | 0 |

Record Count: 65

Data Wizard

Exception Field

Add a field called EXCEPTION to your local data – Long Integer Data
 Type

| Exception Code | Exception Description | | |
|-------------------|--------------------------------------|--|--|
| 1 | Limited Access Highway Features | | |
| 2 | Driveways or Non-Addressable Feature | | |
| 3 | Legacy Addressing Scenario | | |
| 4 | Local Road Naming Convention | | |
| 5 | Value Falls Outside of Jurisdiction | | |
| 6 | Correction Pending Local Review | | |
| 7 | Overlapping Segment Is Valid | | |





- RCLIDs Need to be populated and unique
 - Can use any local unique ID locally needs to be compatible for upload into alphanumeric field type with a 50 character limit
 - Populate using OBJECTID or FID during import process or calculate that field to OBJECTID or FID in your local data





- QA/QC check similar to data assessments that were run as part of grant project
- Additional field checks during import
 - Jurisdiction values
 - Source and date of update
- Critical Errors That would prevent loading of data – no projection file, no RCLID, data types





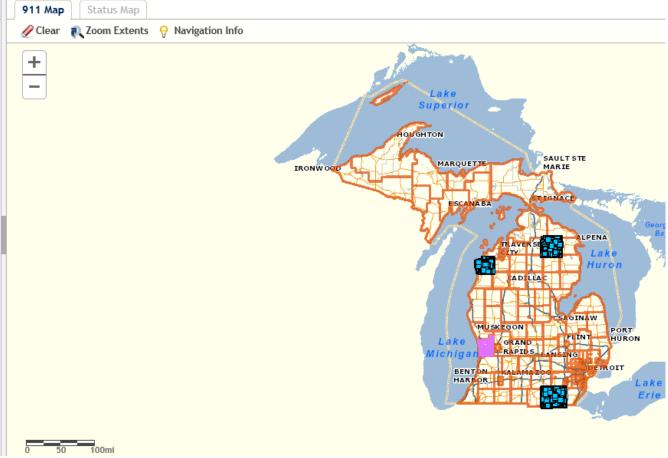
- User needs to have been assigned export rights to export any other jurisdiction's dataset
- PSAP Administrator must initiate request for one of their users to have export rights to neighboring jurisdiction's data
- PSAP Administrators have export rights to all dataset as a system setting
 - Allows for access to datasets in case of large emergency event





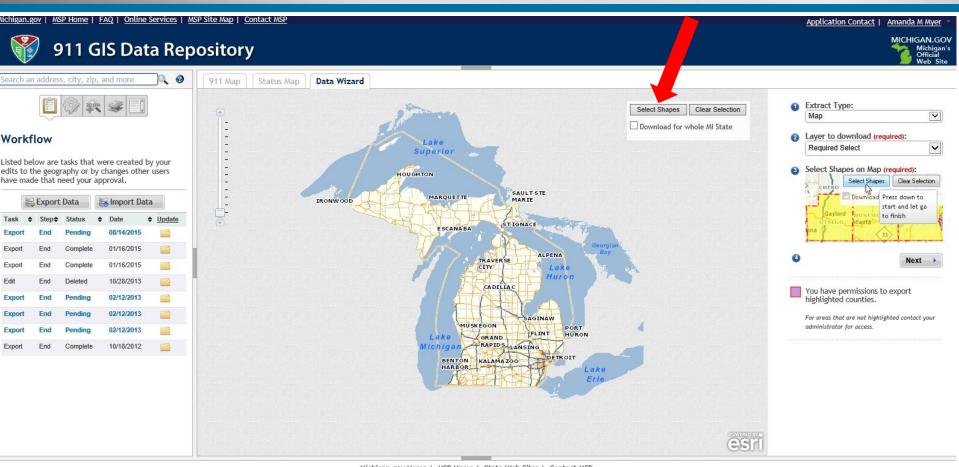
911 GIS Data Repository











Michigan.gov Home | MSP Home | State Web Sites | Contact MSP
Application Contact | Geographic Data Library

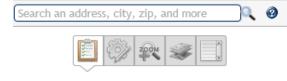
Privacy Policy | Link Policy | Accessibility Policy | Security Policy | Michigan News | Michigan.gov Survey
Copyright © 2001-2015 State of Michigan







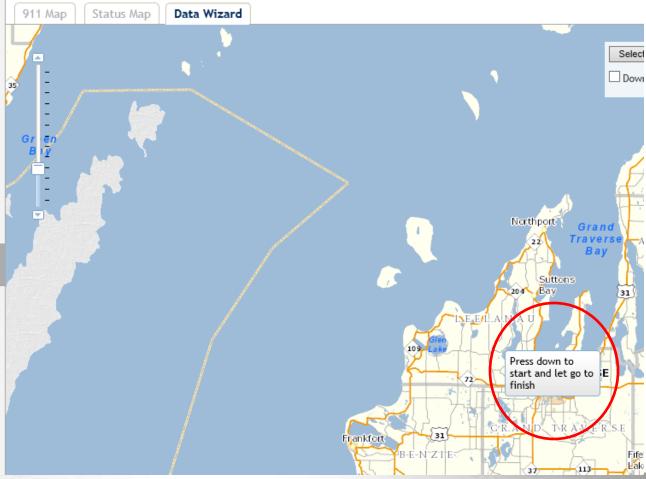
911 GIS Data Repository



Workflow

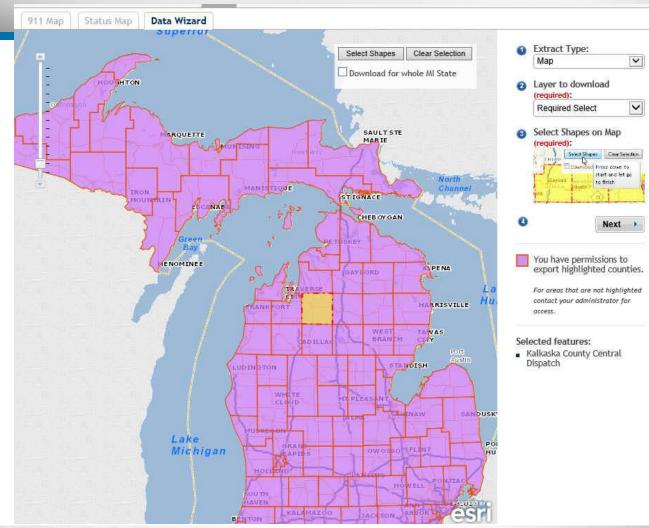
Listed below are tasks that were created by your edits to the geography or by changes other users have made that need your approval.

| Export Data | | | | |
|-------------|--------------|-----------|------------|------------------------|
| Task ♦ | Step | Status \$ | Date | ♦ <u>Update</u> |
| Export | End | Pending | 08/14/2015 | |
| Export | End | Complete | 01/16/2015 | |
| Export | End | Complete | 01/16/2015 | |
| Edit | End | Deleted | 10/28/2013 | |
| Export | End | Pending | 02/12/2013 | |
| Export | End | Pending | 02/12/2013 | |
| Export | End | Pending | 02/12/2013 | |
| Export | End | Complete | 10/18/2012 | |



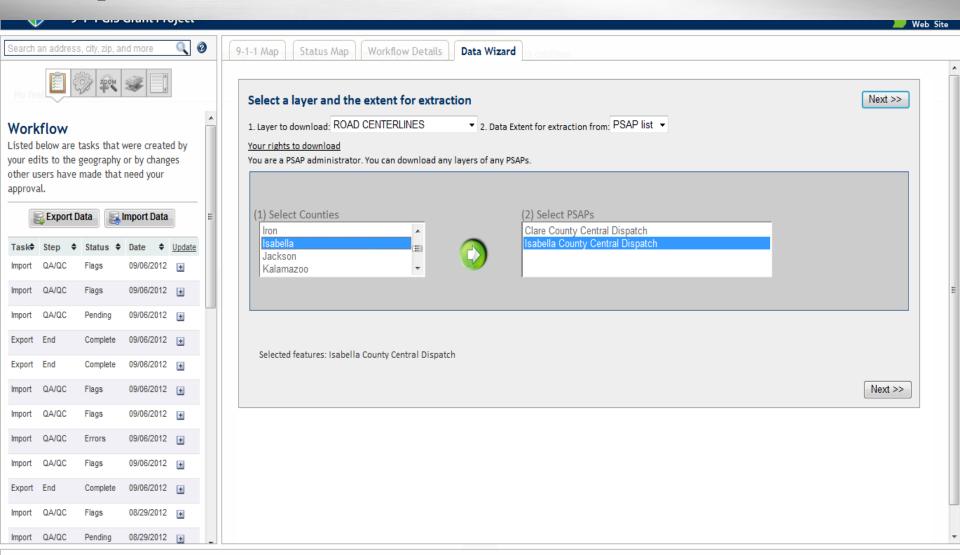


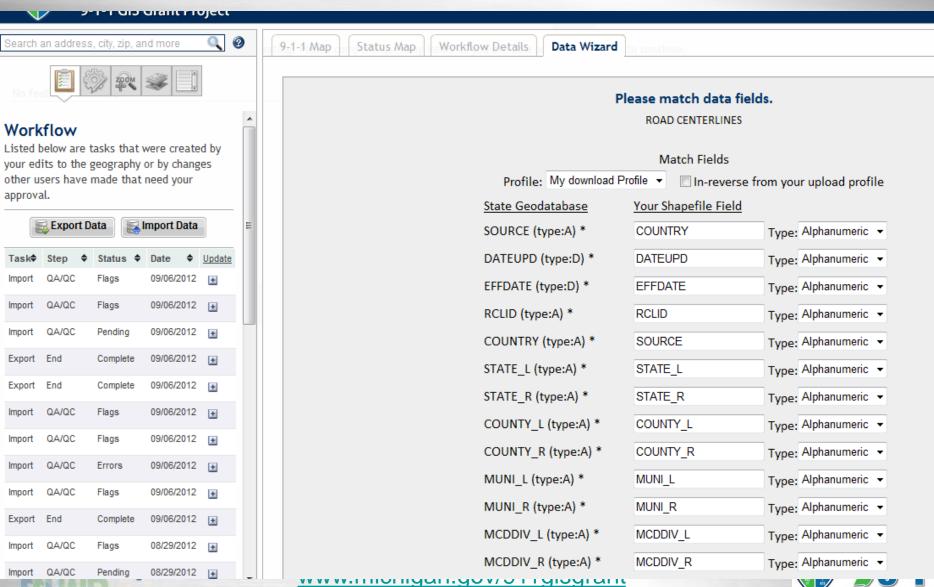


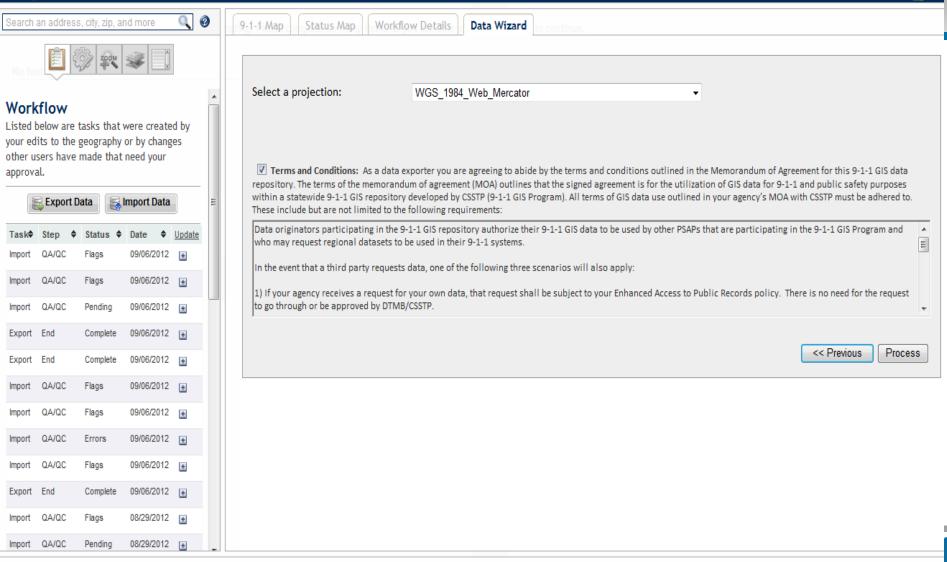








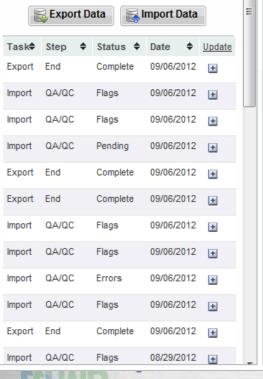




OR OKAMI INGOLO



Listed below are tasks that were created by your edits to the geography or by changes other users have made that need your approval.



9-1-1 Map Status Map Workflow Details Data Wizard

Export Workflow, Created: 9/6/2012 11:06:12 PM

| Step | Status | End | System Messages | Workflow Details |
|-------|----------|----------------------|---|------------------|
| Begin | Complete | 9/6/2012 11:07:02 PM | | |
| End | Complete | 9/6/2012 11:07:02 PM | Data is ready to download. <u>Click here.</u> | |

- CAD profiles
- Working with your CAD vendor to integrate regional maps
- Review edge-match, when possible and coordinate with neighboring jurisdictions where larger discrepancies exist
- Data layers road centerlines, PSAP boundaries, emergency services zones*, structure points* (* incomplete statewide layers)





Red Line Edits- PSAP Boundary

- PSAP Boundary Change Requests
 - Internal communication must be established at local level for approval process
 - Jurisdictions where Michigan Geographic Framework road centerlines are being use have opportunity to use the PSAP Boundary Change tools to make requests or approve changes since PSAP layer developed for the project is statewide





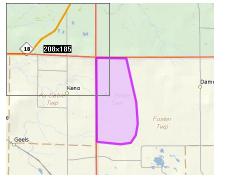
Red Line Tools – PSAP Boundary

Requesting PSAP Boundary Change

PSAP A



PSAP Administrator
Makes Red Line Edit and Starts
Approval Workflow



PSAP B



PSAP Administrator
Receives Email to Log into
System and Approve PSAP Boundary
Change

PSAP Administrator Receives
Status Email



PSAP Administrator Approves or Denies PSAP Boundary Change





Red Line Tools – PSAP Boundary

Requesting PSAP Boundary Change

CSS



If Approved by All Affected PSAPs. CSS Staff Make Boundary Change and Workflow Sent for Final Approval By All PSAPS Affected By Change

PSAP Administrator Receives

Affected PSAPs



PSAP Administrators Receive Email to Log into System and Review Final Boundary Edits And Make Final Approval

> **PSAP Administrator** Approves or Denies **PSAP Boundary Change**







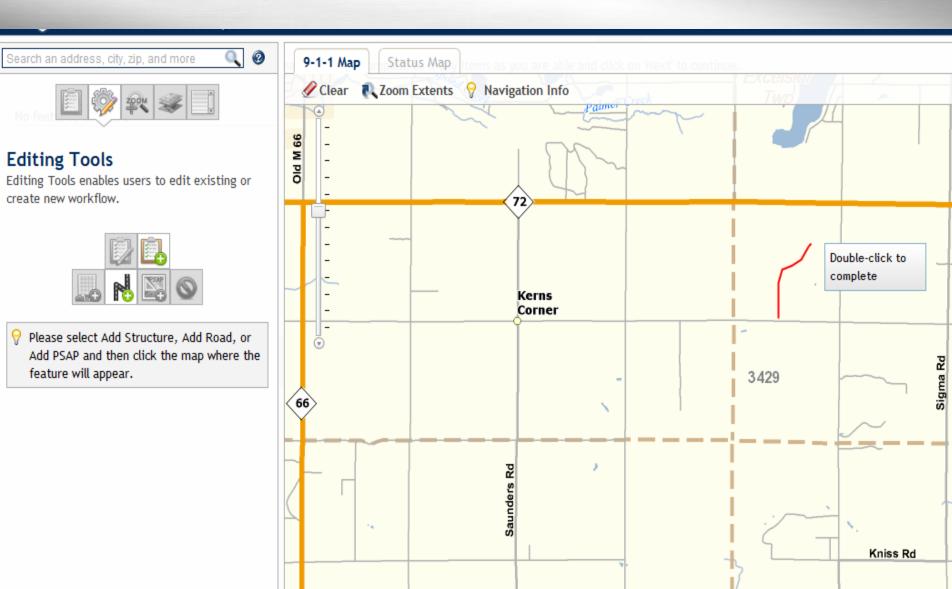
Red Line Edits – Roads or Points

- All users can add red line edits for road or structure points
 - Internal protocol for who red lines can be established, if necessary
 - Notification email goes to PSAP admin and GIS importer for the jurisdiction that the red line is drawn
 - If road is drawn across multiple PSAP jurisdictions, PSAP admin and GIS importer from both jurisdictions get notifications





Red Line Edits - Roads or Points



Edge-matching

- Edge-matching is run during import. Roads are snapped to PSAP boundary layer
- Continued coordination between jurisdictions for edge-matching and addressing attributes along boundaries is also a NENA recommendation for sustaining long-term 9-1-1 GIS data integrity in preparation for NG9-1-1



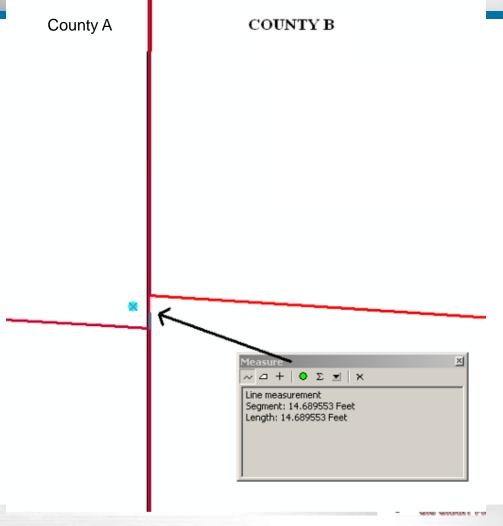


Edge-matching





Edge-matching







Addressing Guide

- Guidelines for addressing techniques
- Continue to incorporate standardization
- Road naming guidelines
- Addressing scenarios
- There will be unique local addressing scenarios
- GIS and MSAG synchronization





More Information

- www.michigan.gov/911GISGrant
- www.michigan.gov/snc
 - Harriet Miller-Brown
 - ➤ Miller-BrownH@michigan.gov
 - **>** 517-243-2075
 - Mark Holmes
 - ➤ HolmesM3@michigan.gov
 - **>** 517-241-6469



